IN THE CLAIMS:

Claim 1 (currently amended) An optical device for producing a polarisation rotation of an optical signal, the device comprising:

a single birefringent element ~~consisting of a single birefringent material~~ for, in use, splitting the optical signal into two orthogonal polarisation component signals;

a polarisation rotating means for, in use, rotating each polarisation component signal by a predetermined amount, and wherein the device is arranged in a manner such that, in use, the two rotated polarisation component signals are ~~being~~ combined by way of ~~the~~ said birefringent element ~~material~~ for providing the predetermined polarisation rotated optical signal.

Claim 2 (original) An optical device as claimed in claim 1 wherein said polarisation rotation is by 90 degrees.

Claim 3 (original) An optical device as claimed in claim 1 wherein the polarisation rotating means comprises a nominally 45° Faraday rotator and an optical circuit arranged in a manner such that, in use, the polarisation component signals are being transmitted twice through the nominally 45° Faraday rotator.

Claim 4 (original) An optical device as claimed in claim 3 wherein the optical circuit comprises a lens and a reflective element.

Claim 5 (currently amended) An optical device as claimed in claim 1 wherein the birefringent element ~~material~~ comprises rutile.

Claim 6 (cancelled)

Claim 7 (currently amended) A method for producing a predetermined polarisation rotations of an optical signal, the method comprising the steps of:

(a) splitting the optical signal into two orthogonal polarisation component signals utilising a single birefringent element ~~consisting of a single birefringent material~~;

(b) rotating each polarisation component signal by nominally predetermined polarisation rotation utilising a polarisation rotation means; and

(c) combining the two rotated polarisation component signals utilising the birefringent element ~~material~~.

Claim 8 (original) A method as claimed in claim 7 wherein said predetermined polarisation rotation comprises a 90 degree polarisation.

Claim 9 (currently amended) A method as claimed in claim 7 wherein said rotating step comprises:

rotating each polarisation component signal ~~comprises~~ utilising a nominally 45° Faraday rotator and an optical circuit arranged in a manner such that, in use, the polarisation component signals are being transmitted twice through the nominally 45°

Faraday rotator.

Claim 10 (original) A method as claimed in claim 9 wherein said optical circuit comprises a lens and a reflective element.

Claim 11 (currently amended) A method as claimed in claim 7 wherein the birefringent ~~material~~ element comprises rutile.

Claim 12 (original) A method as claimed in claim 7 wherein said method further comprises the steps of coupling the optical signal into the device from an optical fibre, and coupling the rotated optical signal back into the optical fibre.

Claim 13 (currently amended) An optical telecommunications system including an optical device for producing a polarisation rotation of an optical signal transmitted by said system, the device comprising:

a single birefringent element ~~consisting of a single birefringent material~~ for, in use, splitting the optical signal into two orthogonal polarisation component signals;

a polarisation rotating means for, in use, rotating each polarisation component signal by a predetermined amount, and wherein the device is arranged in a manner such that, in use, the two rotated polarisation component signals are being combined by way of the birefringent element ~~material~~ for providing the predetermined polarisation rotated optical signal.

Claim 14 (new). The optical device as claimed in claim 1, wherein the optical device comprises an optical circuit consisting of the single birefringent element, the polarization rotating means and other components, including a lens and a reflective element, the other components having no affect on a displacement of the two orthogonal polarization component signals with respect to one another.

Claim 15 (new). The optical device as claimed in claim 1, wherein the optical device comprises an optical circuit comprising the single birefringent element, the polarization rotating means and a reflective element, the two orthogonal polarization component signals being transmitted from the polarization rotating means to the reflective element and back to the polarization rotating means without being displaced with respect to one another.

Claim 16 (new). The method as claimed in claim 7, wherein the two orthogonal polarization component signals are transmitted from the polarization rotating means to a reflective element and back to the polarization rotating means without being displaced with respect to one another.

Claim 17 (new). The optical telecommunications system as claimed in claim 13, wherein the optical device comprises an optical circuit consisting of the single birefringent element, the polarization rotating means and other components, including a lens and a reflective element, the other components having no affect on a displacement of the two orthogonal polarization component signals with respect to

one another.

Claim 18 (new). The optical telecommunications system as claimed in claim 13, wherein the optical device comprises an optical circuit comprising the single birefringent element, the polarization rotating means and a reflective element, the two orthogonal polarization component signals being transmitted from the polarization rotating means to the reflective element and back to the polarization rotating means without being displaced with respect to one another.